CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for managing the feed of a new coil into a continuous inline processing plant of a band-type product, said plant being supplied with successive bands and including means for controlling the continuous running of the band successively into an inlet section, an upstream accumulator, a processing section, a downstream section and an outlet section, the connection of the tail of a first coil when completely unwound with the head of a consecutive next coil being carried out in the inlet section of the plant in two successive stage cycles, respectively a first preparation cycle for preparing the ends, respectively said tail of said first coil and said head ~~ends~~ of ~~both bands~~ said consecutive next coil [[,]] for ~~the~~ their junction thereof and a second junction cycle for joining both facing edges of said ends,

a method wherein the running of the band is stopped or, at least, slowed down in the inlet section for a period of time necessary to carry out all the connection operations, and the processing section is supplied, during the stoppage time, with a band length set aside beforehand in the upstream accumulator for carrying on the process at a normal running speed,

characterized in that joining the facing edges of said ~~the~~ ends ~~of both bands~~ is performed in at least two portions of the inlet section, respectively a first portion and a second portion, between which is located an intermediate accumulator for setting aside a variable band length, and that the time period necessary to perform all the connection operations of ~~both bands~~ said ends is divided into at least two time periods respectively a first time period corresponding to the first preparation cycle and to a first phase of the second junction cycle of the facing edges of ~~both bands~~ said ends, and a second time period corresponding to a second phase of the second junction cycle, said both time periods being separate by a time interval of variable duration corresponding to the running of the band length set aside in the intermediate accumulator.

Claim 2 (previously presented): The method according to claim 1, wherein the junction of both bands is performed by welding in a welding machine, the second junction cycle of the facing edges of the ends of both bands including a welding operation followed by at least one finishing operation of the welded junction, characterized in that the welding machine is located in the first portion of the inlet section, the welding operation being processed at the end of the first time period in a first phase of the second junction cycle, and that the tail of the first band and its welded junction with the head of the next band is then passed in the intermediate accumulator, the running being stopped again in the second portion of the inlet section to perform at least one finishing operation during a second time period of the second junction cycle.

Claim 3 (previously presented): The method according to claim 1, wherein the junction of both bands is performed by welding in a welding machine, the second junction cycle of the facing edges of the ends of both bands including a welding operation followed by at least one finishing operation of the welded junction, characterized in that the welding machine is located in the second portion of the inlet section, that, in a first phase of the second junction cycle, the tail of the first band is temporarily joined with the head of the next band at the end of the first time period-of the general connection process, and that the running of the band is then resumed to bring said temporary junction into the second portion of the inlet section by passing through the intermediate accumulator, the running being stopped again during the second time period of the general connection process in order to perform the welding operation itself and at least one finishing operation in a second phase of the second junction cycle.

Claim 4 (previously presented): The method according to claim 1, characterized in that, before completion of the unwinding of the first coil, band lengths are set aside in the upstream accumulator and in the intermediate accumulator, corresponding to the maximum capacity thereof.

Claim 5 (previously presented): The method according to claim 4, characterized in that, during the first time period of the general connection process, the processing section is supplied at normal speed from the upstream

accumulator, and that, at the same time, the passage, into the upstream accumulator from the intermediate accumulator, of a band length able to replace at least one portion of the length passing into the processing section is controlled.

Claim 6 (previously presented): The method according to claim 1, characterized in that, during the second time period of the general connection process, the processing section is supplied at normal speed from the upstream accumulator, and that the running, through the first portion of the inlet section, of the band length necessary for restoring the intermediate accumulator to the maximum capacity thereof, is controlled.

Claim 7 (previously presented): The method according to claim 5, characterized in that the intermediate accumulator has a capacity corresponding at least to the band length running through the processing section at the normal speed for the duration of the first time period of the general connection process.

Claim 8 (previously presented): The method according to claim 7, characterized in that, once the junction has been stopped in the second portion of the inlet section, the unwinding speed of the new coil is increased for filling, at least partially, the intermediate accumulator, so that, according to the length of the new coil, the tail thereof can be stopped in the first portion of the inlet section for the junction thereof with the head of a third coil, after setting aside a

band length corresponding at least to the first time period of the general connection process.

Claim 9 (previously presented): The method according to claim 5, characterized in that the upstream accumulator has a capacity corresponding at least to the band length running through the processing section at normal speed during the second time period of the general connection process.

Claim 10 (previously presented): The method according to claim 1, characterized in that the filling rate of the intermediate accumulator is managed relative to the length of each new coil so as to restore the upstream accumulator to the maximum capacity thereof after each time period of the general connection process.

Claim 11 (previously presented): The method according to claim 1, characterized in that, at the end of the second time period of the general connection process, the welding spot is annealed.

Claim 12 (withdrawn): A processing plant of a band-type product for performing the method of claim 1, wherein the outlet section is fitted with means for discharging the coils once completely unwound,

the first portion including at least preparation means for preparing before joining the tail of a coil when completely unwound and the head of a new coil, and at

least the second portion including at least means for finishing the welded junction, a welding tool being placed in either of said both portions of the inlet section.

Claim 13 (withdrawn): The processing plant according to claim 12, characterized in that the first portion of the processing section including at least means for preparing the tail and the head of two successive bands, positioning means and a welding tool, the second portion including at least means for finishing the welded spot.

Claim 14 (withdrawn): The processing plant according to claim 12, characterized in that the first portion of the inlet section including at least means for preparing the tail and the head of two successive bands and means for joining temporarily said tail and head, and that the second portion of the inlet section includes at least one welding tool associated with means for positioning and eliminating the temporary junction and means for finishing the welded spot.

Claim 15 (withdrawn): The processing plant according to claim 12, characterized in that the second portion of the inlet section includes means for annealing the welded spot.

Claim 16 (previously presented): The method according to claim 2, characterized in that, before completely unwinding ~~of~~ the first coil, band lengths

are set aside in the upstream accumulator and in the intermediate accumulator, corresponding to the maximum capacity thereof.

Claim 17 (previously presented): The method according to claim 3, characterized in that, before completely unwinding ~~of~~ the first coil, band lengths are set aside in the upstream accumulator and in the intermediate accumulator, corresponding to the maximum capacity thereof.

Claim 18 (previously presented): The method according to claim 16, characterized in that, during the first time period of the general connection process, the processing section is supplied at normal speed from the upstream accumulator, and that, at the same time, the passage, into the upstream accumulator from the intermediate accumulator, of a band length able to replace at least one portion of the length passing into the processing section is controlled.

Claim 19 (previously presented): The method according to claim 17, characterized in that, during the first time period of the general connection process, the processing section is supplied at normal speed from the upstream accumulator, and that, at the same time, the passage, into the upstream accumulator from the intermediate accumulator, of a band length able to replace at least one portion of the length passing into the processing section is controlled.

Claim 20 (previously presented): The method according to claim 16, characterized in that, during the second time period of the general connection process, the processing section is supplied at normal speed from the upstream accumulator, and that the running, through the first portion of the inlet section, of the band length necessary for restoring the intermediate accumulator to the maximum capacity thereof, is controlled.

Claim 21 (previously presented): The method according to claim 17, characterized in that, during the second time period of the general connection process, the processing section is supplied at normal speed from the upstream accumulator, and that the running, through the first portion of the inlet section, of the band length necessary for restoring the intermediate accumulator to the maximum capacity thereof, is controlled.

Claim 22 (previously presented): The method according to claim 18, characterized in that the intermediate accumulator has a capacity corresponding at least to the band length running through the processing section at the normal speed for the duration of the first time period of the general connection process.

Claim 23 (previously presented): The method according to claim 19, characterized in that the intermediate accumulator has a capacity corresponding at least to the band length running through the processing

section at the normal speed for the duration of the first time period of the general connection process.

Claim 24 (previously presented): The method according to claim 6, characterized in that the intermediate accumulator has a capacity corresponding at least to the band length running through the processing section at the normal speed for the duration of the first time period of the general connection process.

Claim 25 (previously presented): The method according to claim 20, characterized in that the intermediate accumulator has a capacity corresponding at least to the band length running through the processing section at the normal speed for the duration of the first time period of the general connection process.

Claim 26 (previously presented): The method according to claim 21, characterized in that the intermediate accumulator has a capacity corresponding at least to the band length running through the processing section at the normal speed for the duration of the first time period of the general connection process.

Claim 27 (previously presented): The method according to claim 22, characterized in that, once the junction has been stopped in the second portion of the inlet section, the unwinding speed of the new coil is increased for filling,

at least partially, the intermediate accumulator, so that, according to the length of the new coil, the tail thereof can be stopped in the first portion of the inlet section for the junction thereof with the head of a third coil, after setting aside a band length corresponding at least to the first time period of the general connection process.

Claim 28 (previously presented): The method according to claim 23, characterized in that, once the junction has been stopped in the second portion of the inlet section, the unwinding speed of the new coil is increased for filling, at least partially, the intermediate accumulator, so that, according to the length of the new coil, the tail thereof can be stopped in the first portion of the inlet section for the junction thereof with the head of a third coil, after setting aside a band length corresponding at least to the first time period of the general connection process.

Claim 29 (previously presented): The method according to claim 24, characterized in that, once the junction has been stopped in the second portion of the inlet section, the unwinding speed of the new coil is increased for filling, at least partially, the intermediate accumulator, so that, according to the length of the new coil, the tail thereof can be stopped in the first portion of the inlet section for the junction thereof with the head of a third coil, after setting aside a band length corresponding at least to the first time period of the general connection process.

Claim 30 (previously presented): The method according to claim 25, characterized in that, once the junction has been stopped in the second portion of the inlet section, the unwinding speed of the new coil is increased for filling, at least partially, the intermediate accumulator, so that, according to the length of the new coil, the tail thereof can be stopped in the first portion of the inlet section for the junction thereof with the head of a third coil, after setting aside a band length corresponding at least to the first time period of the general connection process.

Claim 31 (previously presented): The method according to claim 26, characterized in that, once the junction has been stopped in the second portion of the inlet section, the unwinding speed of the new coil is increased for filling, at least partially, the intermediate accumulator, so that, according to the length of the new coil, the tail thereof can be stopped in the first portion of the inlet section for the junction thereof with the head of a third coil, after setting aside a band length corresponding at least to the first time period of the general connection process.

Claim 32 (previously presented): The method according to claim 18, characterized in that the upstream accumulator has a capacity corresponding at least to the band length running through the processing section at normal speed during the second time period of the general connection process.

Claim 33 (previously presented): The method according to claim 19, characterized in that the upstream accumulator has a capacity corresponding at least to the band length running through the processing section at normal speed during the second time period of the general connection process.

Claim 34 (previously presented): The method according to claim 6, characterized in that the upstream accumulator has a capacity corresponding at least to the band length running through the processing section at normal speed during the second time period of the general connection process.

Claim 35 (previously presented): The method according to claim 20, characterized in that the upstream accumulator has a capacity corresponding at least to the band length running through the processing section at normal speed during the second time period of the general connection process.

Claim 36 (previously presented): The method according to claim 21, characterized in that the upstream accumulator has a capacity corresponding at least to the band length running through the processing section at normal speed during the second time period of the general connection process.

Claim 37 (withdrawn): The processing plant according to claim 13, characterized in that the second portion of the inlet section includes means for annealing the welded spot.

Claim 38 (withdrawn): The processing plant according to claim 14, characterized in that the second portion of the inlet section includes means for annealing the welded spot.

Claim 39 (new): The method according to claim 1, which comprises: running the band at a normal running speed of 400 m/min to 600 m/min.